


Name:


Date:

Class:

Get to Know Phytos

Use the **Get to Know Phytos** (<https://pace.oceansciences.org/phyto/know.htm>) page to investigate topics relating to phytoplankton biology. On the page, click any one of the map concepts to open it in Phytopia.


1. Identify and describe six common physical (*and behavioral characteristics*) in the table cells below. (See green boxes on *Get to Know Phytos*). Use  the to learn more about these characteristics and include in your descriptions.

2. Explore the red boxes to **identify and describe** the distribution (*or environments*) where you find the most/least phytoplankton. Use  the to learn more about these environments.

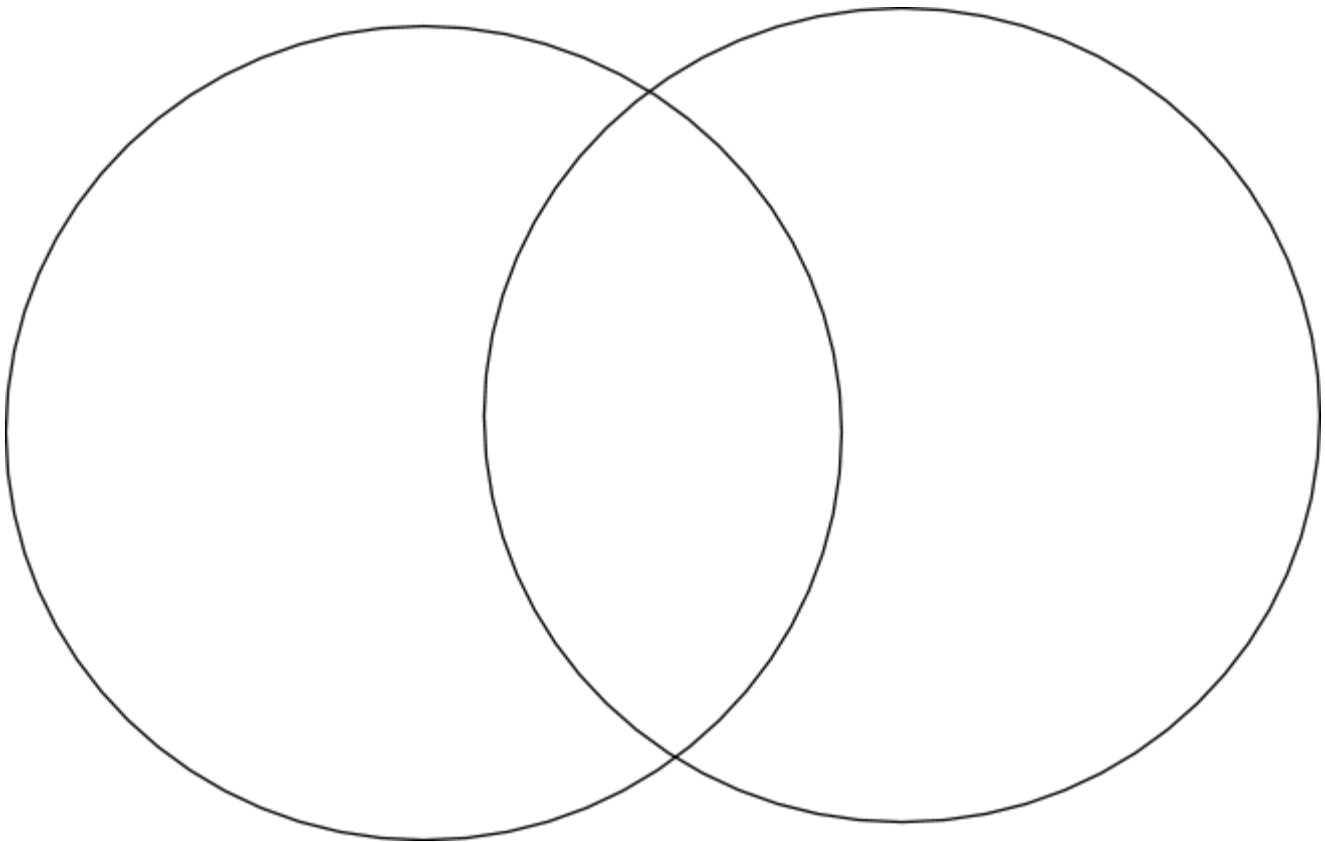
Greatest Distribution:	Least Distribution:

3. Review the harmfulness (yellow boxes) of the phytoplankton species presented in Phytopia. Identify three of the most harmful species, in your opinion. Describe their harmful properties, what are impacted, and the effects of these properties.




Species Name: Harmful Properties: Who/what are impacted: Effects:
Species Name: Harmful Properties: Who/what are impacted: Effects:
Species Name: Harmful Properties: Who/what are impacted: Effects:

4. Explore the role of pigments and storage products (purple boxes). Use the to learn  more about these properties of phytoplankton.

- a. In general, what are pigments and how are they used?
- b. Select two of the main pigments (e.g., *Chlorophyll*, *Fucoxanthin*, *Peridinin*, *Alpha Carotene*, *Phycoerythrin*, *Beta Carotene*) and compare/contrast pigments found in phytoplankton using the Venn Diagram below. Be sure to label each circle.



- c. What are storage products and how do phytoplankton use them?

5. Review the Taxonomy (and classification) in the blue boxes. A.) Select 3 different classes of phytoplankton. Use the  to learn more about this class. B.) Describe their key physical attributes. C.) Select a species of this class; using the  and , describe their characteristics, distribution, pigments, and draw/label a picture of them.

Class 1 Name:	Physical Properties:
Example Species Name: Physical & Behavioral Properties: Distribution: Pigments:	Sketch and Label:
Class 2 Name:	Physical Properties:
Example Species Name: Physical & Behavioral Properties: Distribution: Pigments:	Sketch and Label:
Class 2 Name:	Physical Properties:
Example Species Name: Physical & Behavioral Properties: Distribution: Pigments:	Sketch and Label: